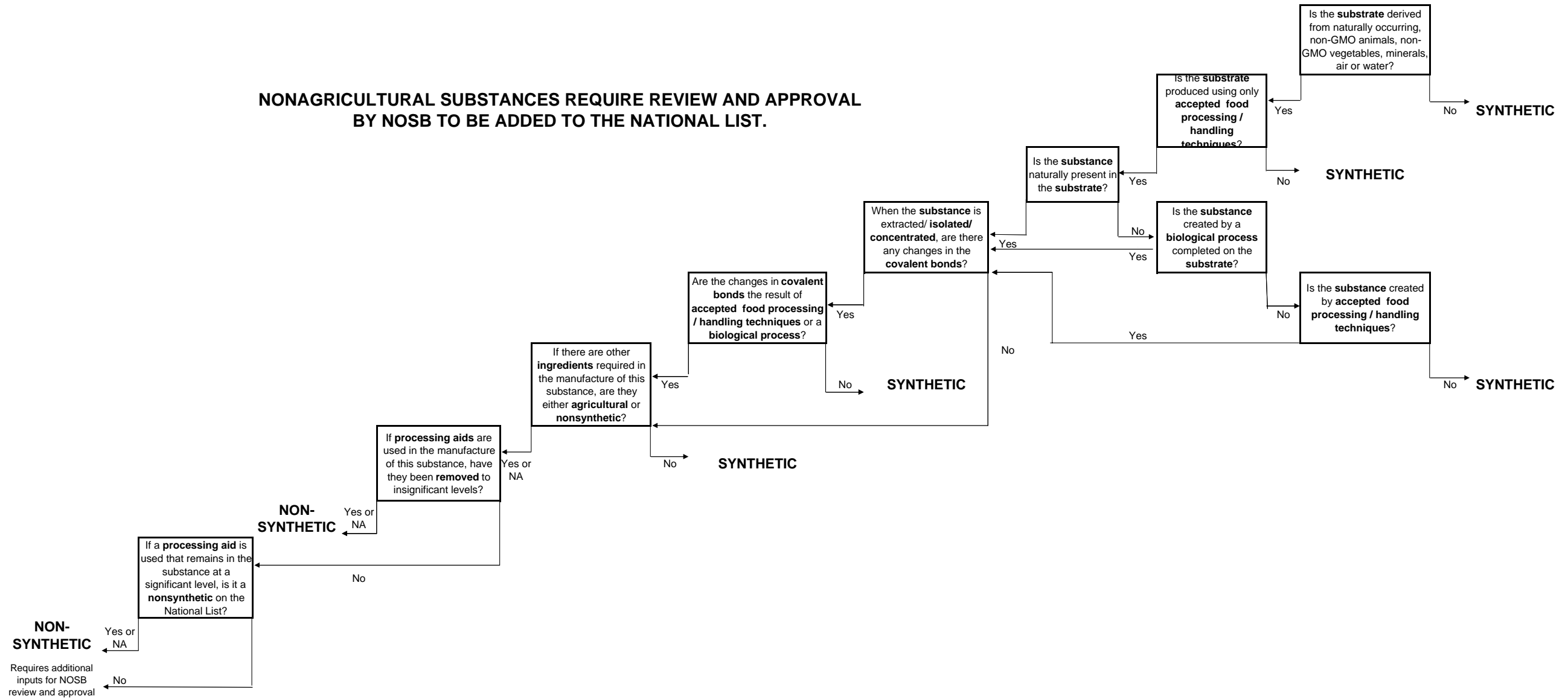


## DECISION TREE: NONSYNTHETIC OR SYNTHETIC

**NONAGRICULTURAL SUBSTANCES REQUIRE REVIEW AND APPROVAL  
BY NOSB TO BE ADDED TO THE NATIONAL LIST.**



# DECISION TREE: NONSYNTHETIC OR SYNTHETIC

## Definitions

<b>NONSYNTHETIC INGREDIENT</b>	A substance that has been derived from nature using biological and/or accepted food processing/handling techniques
<b>SYNTHETIC INGREDIENT</b>	A substance which has had non-biological changes in one or more covalent bonds during manufacture with the exclusion of changes which occur as the result of accepted food processing/handling techniques
Accepted food processing / handling techniques	Food processing / handling methods that are generally recognized as safe: baking, heating, drying, mixing, separating, extracting, cutting, fermenting, evaporating, freezing, etc.
Biological process	A chemical change to a substance which occurs naturally as a result of living cells or the components of living cells, typically enzymes.
Covalent bonds	A strong chemical bond in which a pair of electrons is shared equally by two adjacent atoms with each atom contributing one electron to the bond. When a covalent bond is added, removed or changed in a molecule, an entirely new compound is formed.
Ingredients	Components used in the manufacture of the substance which have <b>some</b> functional effect in the eventual use of the substance and are generally included in the ingredient declaration.
Nonagricultural ingredient (current NOP defined term)	A substance that is not a product of agriculture, such as a mineral or a bacterial culture, that is used as an ingredient in an agricultural product. A nonagricultural ingredient also includes any substance, such as gums, citric acid, or pectin, that is extracted from, isolated from, or a fraction of an agricultural product so that the identity of the agricultural product is unrecognizable in the extract, isolate or fraction.
Processing aids	Minor components used in the manufacture of the substance which have <b>no</b> functional effect in the eventual use of the substance <b>and</b> are either absent in the finished substance or present in very low levels; these are generally not labeled in the ingredient declaration.
Substance	Finished food ingredient under evaluation consisting of one primary component and possibly one or more minor ingredients and/or processing aids used in the manufacturing process.
Substrate	Material(s) from which substance is derived.